A1

6. A method for preventing or treating a disease or a condition in an animal by modulating Cox-2 gene expression, the method comprising administering to the animal a composition comprising black tea extract which comprises theaflavin-3-gallate and theaflavin-3'-gallate in an amount sufficient to modulate the Cox-2 gene expression wherein the disease or condition is selected from the group consisting of cancer, inflammation and arthritis.

7. The method of claim 6 wherein the disease or condition is cancer.

8. The method of claim 7, wherein the cancer is colorectal cancer.

9. The method of claim 8, wherein the composition further comprises an orange peel extract.

10. The method of claim 6 wherein the disease or condition is inflammation.

11. The method of claim 6, wherein the disease or condition is arthritis.

12. A method for preventing or treating a disease or a condition in a animal by modulating Cox-2 gene expression, the method comprising administering to the animal a composition comprising theaflavin-3-gallate and theaflavin-3'-gallate in an amount sufficient to modulate the Cox-2 gene expression wherein the disease is selected from the group consisting of cancer, inflammation and arthritis.

13. The method of claim 12 wherein the disease or condition is cancer.

14. The method of claim 13, wherein the cancer is colorectal cancer.

15. The method of claim 13, wherein the composition further comprises an orange peel extract.

16. The method of claim 12 wherein the disease or condition is inflammation.

Cont A1

17. The method of claim 12, wherein the disease or condition is arthritis.

18. A method for modulating Cox-2 gene expression in a human in need thereof, the method comprising administering an effective amount of a composition which comprises theaflavin-3-gallate and theaflavin-3'-gallate such that modulation of the Cox-2 gene expression occurs.

19. The method of claim 18, wherein the human has cancer.

20. The method of claim 19, wherein the cancer is colorectal cancer.

21. The method of claim 18, wherein the human has inflammation.

22. The method of claim 18, wherein the human has arthritis.

23. A method for modulating Cox-2 gene expression in a cell comprising administering to the cell a composition comprising black tea extract capable of modulating Cox-2 gene expression in an amount sufficient such that a change in Cox-2 gene expression is achieved.

24. The method of claim 23, wherein the composition further comprises an orange peel extract.

25. A method for modulating Cox-2 gene expression in a cell comprising contacting the cell with a composition comprising a mixture of theaflavin polyphenols comprising theaflavin-3-gallate and theaflavin-3'-gallate such that modulation of Cox-2 gene expression occurs.

26. The method of claim 25, wherein the composition further comprises an orange peel extract.

27. A method for inhibiting growth of cancerous cells linked to Cox-2 gene expression comprising contacting said cells with a composition which comprises theaflavin-3-gallate and theaflavin-3'-gallate such that inhibition of Cox-2 gene expression in said cells occurs.

28. The method of claim 27, where in said cells are colon cells.

29. The method of claim 28, wherein the composition further comprises an orange peel extract.